



CU XLPE Type RPVU90 2000V

Single Copper Conductors, 1000V/2000V, 90°C MAX - 40°C MIN, Sunlight Resistant



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE)

APPLICATIONS AND FEATURES:

Single copper conductor with low temperature, moisture resisting XLPE (cross linked polyethylene) insulation. Sunlight Resistant. This product meets the current RoHS requirements. No lead is added or used in manufacturing.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- CSA C22.2 No. 38 Thermoset-insulated wires and cables
- RoHS Compliant Lead-Free, Silicone-Free
- CSA Standard C22.2 No. 271 Photovoltaic Cables

SAMPLE PRINT LEGEND:

SOUTHWIRE LL90458 {CSA} AWG XX (XX.X{mm²}) CU XLPE RPVU90 1000V/2000V -40°C SR DIRECT BURIAL --- {MM/DD/YYYY} --- RoHS {SEQUENTIAL FOOTAGE MARKS} SEQ FEET





Table 1 – Weights and Measurements

Stock Number	Cond. Size	Strand	Insul. Thickness	Approx. OD	Approx. Weight	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C†
	AWG/ Kcmil	No.	mil	inch	lb/1000ft	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp
TBA	14	7	60	0.190	24	0.7	33	2.631	3.170	0.058	25
TBA	12	7	60	0.208	34	0.8	52	1.662	2.002	0.054	30
583670	10	19	60	0.233	46	0.9	83	1.04	1.253	0.050	40
584430!	10	19	60	0.233	46	0.9	83	1.04	1.253	0.050	40
TBA	8	7	80	0.301	78	1.2	132	0.653	0.786	0.052	55
585502^	8	19	80	0.316	78	1.2	132	0.653	0.786	0.052	55
TBA	6	7	80	0.337	114	1.3	209	0.411	0.495	0.051	75
TBA	4	7	80	0.385	167	1.5	333	0.258	0.310	0.048	95
TBA	2	7	80	0.442	251	1.7	530	0.162	0.195	0.045	130
TBA	1	19	95	0.512	322	2.0	669	0.128	0.154	0.046	145
TBA	1/0	19	95	0.551	395	2.2	844	0.102	0.122	0.044	170
TBA	2/0	19	95	0.595	487	2.3	1064	0.081	0.097	0.043	195
TBA	3/0	19	95	0.646	603	2.5	1342	0.064	0.078	0.042	225
TBA	4/0	19	95	0.702	747	2.8	1692	0.051	0.062	0.041	260
TBA	250	37	110	0.778	891	3.1	2000	0.043	0.053	0.041	290
TBA	350	37	110	0.881	1219	3.5	2800	0.031	0.039	0.040	350
TBA	500	37	110	1.009	1705	5.0	4000	0.022	0.029	0.039	430
TBA	600	61	125	1.115	2055	5.5	4800	0.018	0.025	0.039	475
TBA	750	61	125	1.218	2539	6.0	6000	0.014	0.022	0.038	535
TBA	1000	61	125	1.367	3342	6.8	8000	0.011	0.018	0.037	615

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

Ampacities based on 2017 NEC Table 310.15(B)(16): Allowable Ampacities of Insulated Conductors Rated Up to and Including 2000 Volts, 60°C Through 90°C (140°F Through 194°F), Not More Than Three Current-Carrying Conductors in Raceway, Cable, or Earth (Directly Buried), Based on Ambient Temperature of 30°C (86°F)

! Bunch unilay 19 strand tinned copper

^ Combination Unilay per ASTM B787





Table 2 – Weights and Measurements (Metric)

Stock Number	Cond. Size	Strand	Insul. Thickness	Approx. OD	Approx. Weight	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C
	AWG/ Kcmil	No.	mm	mm	kg/km	mm	newton	Ω/km	Ω/km	Ω/km	Amp
TBA	14	7	1.52	4.83	36	17.78	147	8.63	10.40	0.1903	25
TBA	12	7	1.52	5.28	51	20.32	231	5.45	6.57	0.1772	30
583670	10	19	1.52	5.92	68	22.86	369	3.41	4.11	0.1640	40
584430	10	19	1.52	5.92	68	22.86	369	3.41	4.11	0.1640	40
TBA	8	7	2.03	7.65	116	30.48	587	2.14	2.58	0.1706	55
585502	8	19	2.03	8.03	116	30.48	587	2.14	2.58	0.1706	55
TBA	6	7	2.03	8.56	170	33.02	930	1.35	1.62	0.1673	75
TBA	4	7	2.03	9.78	249	38.10	1482	0.85	1.02	0.1575	95
TBA	2	7	2.03	11.23	374	43.18	2359	0.53	0.64	0.1476	130
TBA	1	19	2.41	13.00	479	50.80	2977	0.42	0.51	0.1509	145
TBA	1/0	19	2.41	14.00	588	55.88	3756	0.33	0.40	0.1444	170
TBA	2/0	19	2.41	15.11	725	58.42	4735	0.27	0.32	0.1411	195
TBA	3/0	19	2.41	16.41	897	63.50	5972	0.21	0.26	0.1378	225
TBA	4/0	19	2.41	17.83	1112	71.12	7529	0.17	0.20	0.1345	260
TBA	250	37	2.79	19.76	1326	78.74	8900	0.14	0.17	0.1345	290
TBA	350	37	2.79	22.38	1814	88.90	12460	0.10	0.13	0.1312	350
TBA	500	37	2.79	25.63	2537	127.00	17800	0.07	0.10	0.1280	430
TBA	600	61	3.18	28.32	3058	139.70	21360	0.06	0.08	0.1280	475
TBA	750	61	3.18	30.94	3778	152.40	26700	0.05	0.07	0.1247	535
TBA	1000	61	3.18	34.72	4973	172.72	35600	0.04	0.06	0.1214	615

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

Ampacities based on 2017 NEC Table 310.15(B)(16): Allowable Ampacities of Insulated Conductors Rated Up to and Including 2000 Volts, 60°C Through 90°C (140°F Through 194°F), Not More Than Three Current-Carrying Conductors in Raceway, Cable, or Earth (Directly Buried), Based on Ambient Temperature of 30°C (86°F)

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^ Combination Unilay per ASTM B787

Stock Code and Color (other than Black)

Stock Code	Size AWG	Color
583671	10	Red

